

Title (en)

Method and apparatus for detecting cut-off frequency of pulse signal

Title (de)

Verfahren und Vorrichtung zur Erkennung der Grenzfrequenz eines Impulssignals

Title (fr)

Procédé et appareil permettant de détecter la fréquence de coupure de signal d'impulsion

Publication

EP 2717469 A3 20170802 (EN)

Application

EP 13181992 A 20130828

Priority

KR 20120110702 A 20121005

Abstract (en)

[origin: EP2717469A2] An apparatus (30) and method for detecting a cut-off frequency of a pulse signal (First Pulse Signal) is provided to detect a cut-off frequency of a pulse signal, in a case a frequency of an inputted pulse signal exceeds a maximum rated speed due to various reasons including noises generated by a system environment or an encoder, or system design error, whereby an appropriate action thereto can be taken, the apparatus (30) including an input processor (31) configured to generate a second pulse signal at a time when a rising edge and a falling edge of a first pulse signal appear, in a case the first pulse signal, which is a pulse signal of a monitoring object, is inputted, a counter (32) configured to count a clock signal relative to the second pulse signal generated by the input processor, a reset processor (33) configured to reset the counter at every predetermined (set) period, and a detector (34) configured to generate and output a cut-off frequency of a detection signal, in a case an output value of the counter exceeds a predetermined (set) threshold during the predetermined period.

IPC 8 full level

H03K 5/19 (2006.01); **G01R 23/00** (2006.01); **G01R 23/10** (2006.01); **H03K 5/26** (2006.01); **G01R 23/15** (2006.01); **H03K 21/38** (2006.01); **H03K 21/40** (2006.01)

CPC (source: EP KR US)

G01R 23/15 (2013.01 - KR); **H03K 5/19** (2013.01 - EP US); **H03K 5/26** (2013.01 - EP US); **H03K 21/40** (2013.01 - US); **G01R 23/10** (2013.01 - EP US); **G01R 23/15** (2013.01 - US); **H03K 21/38** (2013.01 - US)

Citation (search report)

- [XYI] US 5206549 A 19930427 - SUZUKI TETSUYA [JP], et al
- [YA] JP 2002232406 A 20020816 - FUJITSU LTD
- [A] US 2009077147 A1 20090319 - HARS LASZLO [US]
- [A] EP 0065998 A1 19821208 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] JP H07235831 A 19950905 - HITACHI LTD, et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

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EP 2717469 A2 20140409; **EP 2717469 A3 20170802**; CN 103716020 A 20140409; CN 103716020 B 20170412; JP 2014077784 A 20140501; JP 6026980 B2 20161116; KR 20140044574 A 20140415; US 2014098927 A1 20140410; US 9088286 B2 20150721

DOCDB simple family (application)

EP 13181992 A 20130828; CN 201310462957 A 20130930; JP 2013195388 A 20130920; KR 20120110702 A 20121005; US 201313975032 A 20130823